

Notice of Allowability**Application No.**

10/566,949

Examiner

WILLIAM T. LEADER

Applicant(s)

ICHIHARA ET AL.

Art Unit

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the papers filed on August 13, 2009.
2. ☒ The allowed claim(s) is/are 1 and 5-11.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date attached.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jason Okun on September 25, 2009.

The application has been amended as follows:

In the Claims:

Claim 1 has been rewritten as follows:

1. (Currently Amended) A solution comprising ionic Fe supplied to the solution by an iron salt, ionic Pt supplied to the solution by a hexachloroplatinate (IV) salt, ~~tartaric acid as a complex agent~~ at a molar ratio of the ionic Fe to the ionic Pt hexachloroplatinate (IV) salt ranging from 0.75 to 3, tartaric acid as a complexing agent, and ~~a~~ chloride ion in an amount in excess of any chloride ion supplied to the solution by the iron salt and the hexachloroplatinate (IV) salt,

wherein the solution is such that it is capable of depositing FePt or FePtCu when plating using the solution is performed,

wherein a concentration of the ionic Fe is from 0.01 mol/L to 0.05 mol/L,

wherein a pH of the solution is from 7.0 to 9.0, and

wherein a the chloride ion concentration is not lower than a molar concentration of the hexachloroplatinate (IV) salt.

COMMENTS

Claim 1 has been amended to more clearly recite applicant's invention. Applicant's response of August 13, 2009, amended claim 1 to replace the expression "ionic Pt" with "hexachloroplatinate (IV) salt", and also amended the claim to recite a molar ratio of ionic Fe to the hexachloroplatinate (IV) salt ranging from 0.75 to 3.0, rather than reciting a molar ratio of ionic Fe to ionic Pt ranging from 0.75 to 3.0. This Examiner's Amendment amends the claim to recite the ratio as originally expressed. Applicant argues that neither Daimon nor Rhen discloses a solution which includes a hexachloroplatinate (IV) salt and a chloride ion, and that Commander and Sallo do not cure the deficiencies of Daimon or Rhen. The Examiner notes that Rhen discloses the use of H_2PtCl_6 to supply platinum to an electroplating solution. Sallo discloses the use of ferrous chloride or ferric chloride to supply iron ions to an electroplating solution. The iron salt of Sallo would at least partially dissociate thereby supplying chloride ions to the solution. However, none of the references of record disclose supplying chloride ion to a plating solution having a pH from 7.0 to 9.0 and comprising 0.01 to 0.05 mol/L ionic Fe, ionic Pt supplied by a hexachloroplatinate (IV) salt so that the ratio of the ionic Fe to the ionic Pt ranges from 0.75 to 3, and tartaric acid as a complexing agent in excess of any chloride ion supplied to the solution by the iron salt and the hexachloroplatinate (IV) salt so that the chloride ion concentration is not lower than the molar concentration of the hexachloroplatinate (IV) salt. Such an addition of chloride ion is disclosed in applicant's example 1 where in addition to the hexachloroplatinate (IV) and iron chloride added to the solution, NaCl was also added to the solution. The NaCl would have supplied chloride ion to the solution in excess of any chloride ion supplied by the hexachloroplatinate (IV) salt and the iron chloride. Applicant discloses that

the presence of an excess quantity of chloride ions is desirable for stabilization of the plating solution. See paragraph [0039] of applicant's specification.

As stated in the restriction requirement mailed on April 8, 2008, restriction was required between product and process claims. When a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP 821.04. Consequently, since product claims 1, 5 and 6 as amended have been found allowable, remaining claims 7-11, all of which depend directly or indirectly on product claim 1, have been rejoined.

The following is an examiner's statement of reasons for allowance: as indicated above, none of the references of record disclose supplying chloride ion to a plating solution having a pH from 7.0 to 9.0 and comprising 0.01 to 0.05 mol/L ionic Fe, ionic Pt supplied by a hexachloroplatinate (IV) salt so that the ratio of the ionic Fe to the ionic Pt ranges from 0.75 to 3, and tartaric acid as a complexing agent in excess of any chloride ion supplied to the solution by the iron salt and the hexachloroplatinate (IV) salt so that the chloride ion concentration is not lower than the molar concentration of the hexachloroplatinate (IV) salt.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM T. LEADER whose telephone number is (571) 272-1245. The examiner can normally be reached on Mondays-Thursdays and alternate Fridays, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William Leader/
September 24, 2009

/PATRICK RYAN/
Supervisory Patent Examiner, Art Unit 1795